



# A CANADA GOOSE MANAGEMENT PLAN FOR THE CITY OF COON RAPIDS

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# **1. The City of Coon Rapids Context and Goose Management Concerns**

## **1.1. Canada Goose Habitat Use and Population Estimate**

The City of Coon Rapids encompasses approximately 14,950 acres of varied habitats. Urban development, various wetland types, floodplains, ponds, lakes, rivers, creeks, and developed recreational areas are the dominant land cover types within the boundaries (see Appendix A).

Canada geese use various areas of Coon Rapids. Nesting occurs in sod farms and natural open spaces found within and adjacent to the areas identified in Appendix A. Newly hatched broods tend to loaf and feed in the public open spaces and developed recreation areas. After their flightless period, Canada geese are more mobile and frequently move from wetland, floodplain, public open space and recreation areas to adjacent feeding areas in developed urban and recreational areas, and the City's natural and man-made stormwater ponding/drainage system.

During the late spring and early summer months, when adult geese pair and build nests, approximately 100 breeding pairs are typically present. In mid-summer, as many as 400 young and adult geese are found in these same areas, depending on reproductive success. Later in the summer, (late July through September) flocks exceeding 800 individuals are observed in area, due to birds flying into the vicinity from surrounding areas.

## **1.2 Visitation and Recreation Areas**

Visitor and recreation areas in Coon Rapids that are impacted the most by geese include Bunker Hills Golf Course, Sand Creek Athletic Complex, Wintercrest Park, the Coon Rapids Soccer Complex, and the Coon Rapids Ice Center. These locations have surface water elements and vast areas of open space. The general public occupies all areas of the open space for active (organized athletic field usage and golf) and passive recreation (picnicking, pick-up games and hiking/trail use), and general recreational use (playgrounds, horse shoes, etc.).

## **1.3 Concentrated Habitat Use and Human Use Conflicts**

All park and recreation spaces typically experience excessive goose excrement in many areas; including parking lots and picnic areas, along trails, on the athletic fields, and around the concession and bathroom areas. Geese often feed on and cause damage to the fairways and greens at the Bunker Hills Golf Course and also cause similar concerns on the athletic fields (baseball, football, soccer, etc.), typically at the most critical time of establishment and high usage during the athletic seasons. These excrement deposits are a nuisance and elicit numerous complaints by both employees and park users, especially from the various recreational groups that rely on the City's park spaces.

Rocket Turf sod farm is a large open area adjacent to Coon Creek that also experiences high numbers of geese and the negative impacts of them (fecal deposits, turf damage, aggressive behavior, etc.).

### **1.3.1 Proximity Sensitive areas**

In addition to the public and recreational spaces listed above there are several schools, regional parks, and the Springbrook Nature Preserve located in close proximity that may experience additional geese if management resulted in dispersal of the goose population vs. removal. Additionally, if geese take flight during goose management activities it could lead to a scattering of the population to adjacent municipalities, town home association open spaces, or alternate local park and/or treatment pond locations; resulting in similar nuisances and complaints from area residents and business owners.

### **1.3.2 Water Quality Impacts**

In addition to the damage and nuisance concerns on the green spaces and hard surfaces, creeks and treatment ponds are also experiencing E.coli loadings from wildlife and goose excrement (whether direct or via the storm sewer system). As storm water travels through the City collection system towards the Mississippi River significant concentrations could become problematic and have already impacted many creeks in the City and Coon Creek Watershed District (Coon Creek, Pleasure Creek, Sand Creek, and Springbrook Creek). Crooked Lake is also a popular recreational area for fishing and water sports, and while there is no active beach component people do use it for swimming purposes.

Coon Rapids works cooperatively with the Coon Creek Watershed District (CCWD) on all water quality issues, and has actively participated in Minnesota Pollution Control Agency (MPCA) Watershed Restoration and Protection Strategy (WRAP) and Total Maximum Daily Load (TMDL) studies for surface waters within the City limits. These studies analyzed and reviewed impairments (including E.coli) of local waterbodies, and how E.coli from wildlife (including geese) attributed to the associated impairments in the waterbodies described above. Animal unit estimates were made for both deer and waterfowl from previous population surveys conducted by the Minnesota Department of Natural Resources (DNR) and the United States Fish and Wildlife Service (USFWS). Deer and waterfowl observations were recorded during roadside animal counts; however, the numbers of observations were less conservative than estimates derived from population studies done by DNR and USFWS. The percentage of total E. coli made available by all wildlife ranged from a low of 7% in Coon Creek to a high of 10% in Springbrook Creek. Of all the animals considered in the wildlife category geese accounted for approximately 40% of the E.coli loading in the impaired waterbodies. Wildlife contributions are anticipated to fluctuate during early spring and fall as a result of migration patterns. Expansive sod fields, and multiple open recreational areas inside the CCWD are ideal resting locations for migrating waterfowl.

Based upon these studies the City of Coon Rapids and the CCWD will be preparing and implementing Waste Load Allocations (WLA). The agreed upon approach to meeting the WLA will be a cooperative approach with all member cities, whereby mitigation and improvements will be made in the most cost effective location within the District vs. each city being responsible for their own municipal boundaries. The implementation and the outcomes will be tracked by the CCWD and reviewed by the MPCA. The report and its goals can be viewed at <https://www.pca.state.mn.us/sites/default/files/wq-iw8-44e.pdf>.

### **1.3.3 Water Quality Sampling**

All water quality sampling in Coon Rapids to date has been conducted by the Anoka Conservation District and/or the CCWD. All sampling is conducted on regular intervals and reviewed for elevated levels that could be concerning to human health and welfare. The protocols for testing (frequency, locations, etc.) can be found in the report at the link above.

## **2. Canada Goose Management Recommendations**

### **2.1 Goals and Measures**

Canada goose management goals for Coon Rapids have historically been conducted by trap and removal practices of adult birds and goslings in the summer (before goslings take flight). Coon Rapids would, however, like to keep all possible options available; including recording and tracking, habitat modifications, redistribution, egg removal, trap and process, and hunting. Management activities should be flexible and allow for the use of the best option available based upon the conditions present at the

time of permitting and past management practices. Coon Rapids would like to achieve a localized reduction in nesting and flightless geese, and has adopted the ongoing goal of no more than 75 breeding pairs within the City limits. The ongoing goal for reducing loafing on and near Bunker Hills Golf Course, Sand Creek Athletic Complex, Wintercrest Park, the Coon Rapids Soccer Complex, and the Coon Rapids Ice Center area(s) is to prevent all significant use of the open green space and hard surface areas utilized for recreational and public use purposes by Canada geese during the summer months (May through September).

## **2.2 Geographic Scope**

The population reduction and concentrated use reduction goals are primarily focused on 5 distinct areas, but should also be considered in all areas within the City limits as conditions dictate. The population reduction area outlined in Appendix B represents the areas adjacent to Bunker Hills Golf Course, Sand Creek Athletic Complex, Wintercrest Park, the Coon Rapids Soccer Complex, and the Coon Rapids Ice Center that would be expected to produce broods that would subsequently move to these sites after hatching. Due to the historically observed quantity of geese and proximity of impaired surface waters, population reduction activities may also be focused near the Rocket Turf sod farm or other similar environmentally susceptible areas not within the public domain (private properties).

## **2.3 Management Techniques**

The proposed techniques for Canada goose management at the City of Coon Rapids are varied in type and geographic area. Meeting the goals as outlined will require the implementation of a broad set of techniques. Any one management technique used alone will likely be ineffective for any significant length of time, since tolerance and habituation will likely occur. As a result we propose to use an integrated management approach, with a number of various techniques applied in varying ways, times and locations.

### **Recording/Tracking Management Activities for Future Adjustments/Improvements**

All management activities will be documented on the Management Activity Tracking Form in Appendix C and submitted to the Area Wildlife Manager by September 10<sup>th</sup> of each year. Permittee must keep a copy of this on file to help facilitate future management activities that might need adjustments or improvements.

### **Habitat Modification**

Various private properties and/or businesses regularly report goose damage and fecal deposits on or adjacent to their property. Coon Rapids would like to be able to adjust management activities to address such verified complaints within the City limits on an as needed basis, as documented by the previous record and tracking activities. Options to consider for habitat modification will be tailored to meet the unique characteristics and concerns of the location(s); including increased height of vegetation, vegetation buffer distance, planting or promoting shrub or natural willow colonization, landscape plantings, or by ceasing to mow certain areas. Any ideas to be considered would be discussed with appropriate DNR staff.

### **Temporary Physical Barriers**

The use of temporary electric, snow fence, or woven wire fencing that limits Canada goose access to Crooked Lake, public open spaces, stormwater treatment ponds, and other impaired waterbodies during the spring, summer, and/or fall season will be considered. Any fencing that is installed would need to be removed and re-established in a manner that prevents geese from entering the fenced off area from the water or from the adjacent upland area in a more permanent fashion.

### **Permanent Physical Barriers**

The use of permanent woven wire fencing that limits Canada goose access to Crooked Lake, public open spaces, stormwater treatment ponds, and other impaired waterbodies during the spring, summer, and/or fall season may be considered. Fencing would be installed and established in a manner that prevents geese from entering the fenced off area from the water or from the adjacent upland area. Routine inspection of the fence will be done on a monthly basis. Fencing could be used in conjunction with vegetation barriers, or the use of vegetation to obscure the fence. The area DNR Wildlife Office may be contacted for further information and assistance.

### **Redistribution Techniques**

Preventing Canada geese from loafing on the beach, developed recreational and public spaces, and adjacent areas will be an ongoing activity during the summer months. We anticipate using a number of techniques to redistribute the geese to other areas within the park. Additionally, we plan to use multiple techniques at varied times and with subtle shifts in methods so that the geese do not become habituated to any one technique or get accustomed to a particular schedule of activity. All of the methods will have some degree of impact on the park visitor experience, and mitigating this disruption will be a priority. Some redistribution techniques require specific training, personal protective equipment and adherence to policies and procedures for their safe use. While some of these visitor impacts and safety considerations are mentioned alongside each technique, a thorough examination of these and other issues should be conducted prior to employing a particular redistribution technique. Depending on the methods used, notification will be provided via location specific signage, direct mailings to adjacent properties, and/or a posting to the City website.

- Human and mechanical disruption
  - Disturbing loafing and feeding Canada geese by individuals on foot so geese can be moved from the area of concern to an adjacent area or off the property.
- Predator decoys
  - The use of 2D or 3D coyote/dog decoys on the athletic fields or open green space to discourage use by geese is a management option. Decoys that are placed intermittently and exhibit periodic motion due to wind gusts can be effective at deterring geese.

### **Excrement Removal**

Sporadic removal of goose excrement from public open spaces may be necessary during the late spring and summer months. The primary goal is to effectively redistribute geese away from these areas, with the goal being a reduction of feces in these areas. However, it may be necessary to remove incidental goose feces from the athletic fields, trails, and/or open green space areas on an as-needed basis.

## **2.3.1 Population Reduction**

### **Nesting Management**

Annual nest search and treatment should be conducted in localized areas. The areas to be searched and treated include suitable nesting habitat immediately adjacent to Bunker Hills Golf Course, Sand Creek Athletic Complex, Wintercrest Park, the Coon Rapids Soccer Complex, the Coon Rapids Ice Center, and

Rocket Turf sod farm see Appendix D. Nest searches and treatment protocol should follow methods prescribed by the required USFWS and MN-DNR permits. Permit conditions will be followed and reporting will be conducted on an annual basis. To facilitate future nest searches in large areas, GPS coordinates of all Canada goose nests should be obtained since nest site fidelity is strong and the same nest sites are likely to be used in subsequent years.

#### **Trapping and removal (during flightless period)**

Capture and removal of flightless, mixed age groups of geese during the summer flightless period is an effective way to reduce the localized population of geese during the peak beach and recreational use time (June-July). The use of contractors or trained staff (if permitted) to capture, remove and dispose of geese from the City of Coon Rapids is a management option. Such removal would need to be detailed as part of a removal permit application through the DNR Fish & Wildlife Division, and goose removal and disposition would need to be conducted according to the permit conditions.

#### **Goose harvest**

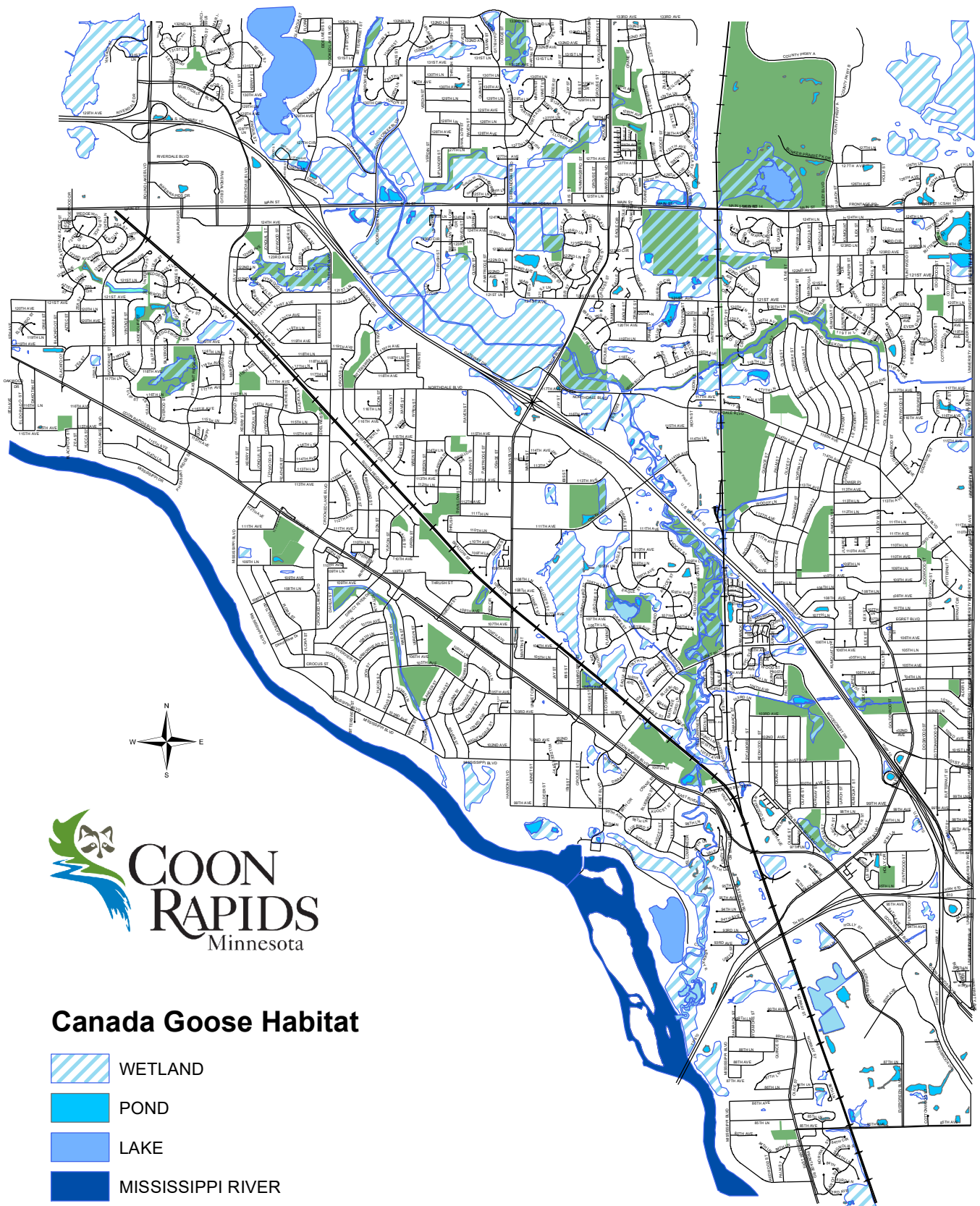
Selective and occasional lethal removal of individual geese is an effective complement to pyrotechnic shells and other redistribution or hazing methods. Lethal removal of geese by means of shooting geese on an occasional basis is a management option. Such removal would need to be detailed as part of a removal permit application through the DNR Fish & Wildlife Division, and goose removal and disposition would need to be conducted according to the specific permit conditions. Such conditions would include the number of individuals and the specific information about the methods to be used in their harvest and disposition.

### **2.4 Public Information**





Informing the public and park users about Canada goose management activities is an integral part of a successful goose management plan. Information and signage detailing some of the methods being used will be developed to provide users with background information. Signage or posted notices may be developed for certain activities. Additionally, individual users will be notified of pending activities that might be considered alarming had they not received prior notice and explanation. All persons performing management activities should provide users with accurate and thorough information about our goose management objectives, and also inform users how the particular management activity being conducted fits into the larger Canada goose management plan.

### **2.5 Partner Relationships and Permit Requirements**

Coordination with all appropriate entities; including (but not limited to) residents, local law enforcement, lake area association(s), the MPCA, and the CCWD will be conducted for population monitoring and permitting, and all goose management activities. Compliance with all DNR permitting requirements; including annual reporting, and notification and involvement of the Area Wildlife Manager will be strictly adhered to.



## Canada Goose Habitat

-  WETLAND
-  POND
-  LAKE
-  MISSISSIPPI RIVER
-  CREEK
-  DEVELOPED RECREATION

Date: 12/28/2016





Date: 12/28/2016

## APPENDIX C: MANAGEMENT ACTIVITY DOCUMENTATION FORM

[illegible]



Date: 12/28/2016